

Cow Choppers vs. Corn Choppers

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Winter has arrived in modest force, at least for a while, politely reminding all of us to bring the cows into those areas accessible during the winter. Many cows still freely roam the valleys and hills.

However, if the intention is to round the cows up, a thin line exists between the annual roundup and the final roundup. Some nooks and crannies are simply not reachable once old man winter nails the door shut. Perhaps with the passing of each generation, someone still wants to prove the boss wrong and push the limit, but unlike many professions, nature can and will prove you wrong.

With the promise of northern lights soon appearing, the NDSU Dickinson Research Extension Center is perhaps pushing limits, too. We're stretching the limits of how cows need to be managed in today's environment of labor shortages and the intense need to monitor inputs and outputs.

The center has been grazing corn, minimizing the need for labor and reaping the added benefit of eliminating the need to haul waste. Both labor and waste have dollars attached. The cattle are expected to survive with standing corn, a free-choice salt, a calcium-phosphorous mineral and 1.5 to 2 pounds of a 32 percent protein cake. Their protection from the elements is a 9-foot high board windbreak with 20 percent porosity.

Last year, a relatively mild year, one group of 16 cows grazed 112 days from Nov. 15 to March 7. The pasture was 28 acres with half that planted to corn and half to oat stubble. The 14 acres of oat stubble had about 10 tons of oat stubble, regrowth and weeds, and the 14 acres of corn produced about 70 tons of dry standing corn. The estimated corn production was 80 bushels per acre of 57-pound test weight corn.

As the cows entered the pasture, about 5 tons of dry corn and other dry forage was available per cow. No attempt was made to restrict access to the corn crop, thus allowing the cows free access to the entire plot. With little snow accumulation and above-normal temperatures, the cows did quite well.

According to Jim Nelson, Dickinson Research

Extension Center scientist in charge of the project, cows gained an average of 191 pounds with an average daily gain of 1.7 pounds per day while grazing standing corn. Nelson also noted the cows increased average body condition score by more than 2.5 units, starting at a condition score of a high five and ending at a low eight. (Typical cows in North Dakota should be in a condition score five or six prior to calving and subsequent breeding. The condition score eight cows would be considered fat.)

Interestingly, none of the cows experienced health problems while on trial or after returning to the calving pastures. The corn costs averaged \$127 per acre or \$1,773 for the total 14 acres. The total supplement cost was \$432, for a grand total cost of \$2,205. No charge was assessed for the oat stubble. The end result was a wintering charge of \$138 per head for 112 days of feeding or a daily feed charge of \$1.23. Granted, corn costs were just under \$40 a month for feed last winter, and pitching out 30 pounds of \$60-per-ton hay to the cows would have cost less than \$30 a month per cow, and at \$80 per ton hay would approach \$40 per cow, a cost equivalent to grazing the corn.

But perhaps the real question still returns to labor and waste management, and the jury has not returned the verdict. Perhaps Garry Ottmar, our ranch manager, says it best: "In driving out to check the cows on corn, I often wonder if using cattle is really the most efficient way to harvest that corn crop. Then I recall the tractor, the chopper, the breakdowns and how fast chopping enthusiasm drains. Remembering those days, I'm hoping for cow choppers."

Stay tuned. May you find all your ear tags.

Your comments are always welcome at www.Beeftalk.com. For more information, contact the North Dakota Beef Cattle Improvement Association, 1133 State Avenue, Dickinson, ND 58601 or go to www.CHAPS2000.com on the Internet. In correspondence about this column, refer to BT0114.

Cow Performance and Cost While Grazing Corn



Days grazing (Nov. 15 to March 7)	112
Average cow gain	191 pounds
Average increase in body condition	2.5 units
Daily feed charge	\$ 1.23